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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948				
			EXAMINER QUASH, ANTHONY G	
			ART UNIT 2881	PAPER NUMBER

DATE MAILED: 11/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,156

Applicant(s)

CHARLES PENNINGTON,
GEORGE CARVER

Examiner

Anthony Quash

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 17 and 19-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 17 and 19-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claims 13-16,18 have been canceled by applicants' amendment, paper number 5.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,17 are rejected under 35 U.S.C. 102(b) as being anticipated by Heuchemer [DE-3905870]. As per claims 1,17, Heuchemer [DE-3905870] discloses a storage system comprising a container having a wall with an outer surface and an inner surface and a first open end, the container defining an interior, a closure lid (16) configured to be inserted within the open end and adapted to engage in a sealing relationship with the inner surface; and a compression link (22) having a container engagement surface and a closure lid engagement surface, the compression link being configured to engage between the closure lid and the inner surface to retain the closure lid in sealing engagement with the container, the container engagement surface and the closure lid engagement surface being configured to extend outwardly from each other, the container engagement surface being adapted to engage the inner surface and the

closure lid engagement surface being adapted to engage the closure lid such that, the closure lid is retained in sealing engagement with the inner surface. See Heuchemer [DE-3905870] abstract, and figs. 1-2.

Claims 1,17 are rejected under 35 U.S.C. 102(b) as being anticipated by Baumann [178]. As per claims 1,17, Baumann [178] discloses a storage system comprising a container having a wall with an outer surface and an inner surface and a first open end, the container defining an interior, a closure lid (12) configured to be inserted within the open end and adapted to engage in a sealing relationship with the inner surface; and a compression link (13,46) having a container engagement surface and a closure lid engagement surface, the compression link being configured to engage between the closure lid and the inner surface to retain the closure lid in sealing engagement with the container, the container engagement surface and the closure lid engagement surface being configured to extend outwardly from each other, the container engagement surface being adapted to engage the inner surface and the closure lid engagement surface being adapted to engage the closure lid such that, the closure lid is retained in sealing engagement with the inner surface. See Baumann [178] abstract, figs. 1-2,4,9-11b, columns 4-5.

Claims 1,17 are rejected under 35 U.S.C. 102(b) as being anticipated by Bump [268]. As per claims 1,17, Bump [268] discloses a storage system comprising a container having a wall with an outer surface and an inner surface and a first open end, the container defining an interior, a closure lid (20) configured to be inserted within the open end and adapted to engage in a sealing relationship with the inner surface; and a

compression link (31,33) having a container engagement surface and a closure lid engagement surface, the compression link being configured to engage between the closure lid and the inner surface to retain the closure lid in sealing engagement with the container, the container engagement surface and the closure lid engagement surface being configured to extend outwardly from each other, the container engagement surface being adapted to engage the inner surface and the closure lid engagement surface being adapted to engage the closure lid such that, the closure lid is retained in sealing engagement with the inner surface. See Bump [268] abstract, figs. 2-4, col. 2 lines 35-45, and col. 4 lines 1-30.

Claims 1-4,6-10,17,19,21-22,25,27,29-31,33 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer [096]. As per claims 1,17,25, Meyer [096] discloses a storage system comprising a container having a wall with an outer surface and an inner surface and a first open end, the container defining an interior, a closure lid (11) configured to be inserted within the open end and adapted to engage in a sealing relationship with the inner surface; and a compression link (6) having a container engagement surface and a closure lid engagement surface, the compression link being configured to engage between the closure lid and the inner surface to retain the closure lid in sealing engagement with the container, the container engagement surface and the closure lid engagement surface being configured to extend outwardly from each other, the container engagement surface being adapted to engage the inner surface and the closure lid engagement surface being adapted to engage the closure lid such that, the closure lid is retained in sealing engagement with the inner surface. See Meyer [096]

abstract, figs. 1-4, column 1, col. 2 lines 35-68, col. 3 lines 1-25, and col. 4 lines 26-31.

In addition, Meyer [096] discloses an outer lid (25) configured to engage a distal end of the container, wherein the outer lid has a lid hold-down member (26) associated therewith for retaining the outer lid by exerting force on the outer surface of the wall of the container. See Meyer [096] fig. 3, col. 1 lines 53-60, col. 2 lines 33-40, and col. 3 lines 1-25. Meyer [096] also discloses engaging the compression link between the closure lid and the inner surface such that the closure lid is retained by placing a portion of the closure lid under compression and a corresponding portion of the inner surface under tension. See Meyer [096] fig. 3.

As per claim 2, Meyer [096] discloses the inner surface having a closure lid retention ledge (58) formed thereon, and wherein the container engagement surface of the compression link is adapted to engage the closure lid retention ledge (58). See Meyer [096] fig. 4.

As per claim 3, Meyer [096] discloses the closure lid (11) having a stepped outer surface defining an annular region, and wherein the compression link (6) is adapted to be received within the annular region. See Meyer [096] figs. 1-4 and col. 5 lines 1-15.

As per claims 4,29 Meyer [096] discloses the inner surface having a recess (2) formed therein for receiving at least a portion of the compression link (6). See Meyer [096] fig. 3.

As per claim 6, Meyer [096] discloses an outer lid configured for engaging a distal end of the container such that the closure lid is disposed between the outer lid and the interior. See Meyer [096] col. 3 lines 15-25.

As per claims 7,21,30, Meyer [096] discloses a bearing member (52) configured to fit between the closure lid engagement surface and the container engagement surface of the compression link, wherein the bearing member engages the closure lid. See Meyer [096] fig. 4, and col. 4 lines 25-35.

As per claims 8,33, Meyer [096] discloses an exothermic material, wherein the exothermic material has been inserted within the container and sealed therein. See Meyer [096] col. 3 lines 1-15.

As per claim 9, Meyer [096] discloses the outer lid (25) having a lid hold-down member (26) associated therewith for retaining the outer lid in sealing engagement with the container. See Meyer [096] fig. 3, col. 1 lines 53-60, col. 2 lines 33-40, and col. 3 lines 1-25.

As per claims 10,31, Meyer [096] discloses the closure lid (50') having a stepped outer surface (57), the stepped outer surface being adapted to engage the bearing member (52). See Meyer [096] fig. 4, and col. 4 lines 1-5, 12-34.

As per claim 19, Meyer [096] discloses providing an outer lid (25) configured for engaging a distal end of the container such that the closure lid (11) is disposed between the outer lid (25) and the interior; and retaining the outer lid (25) in sealing engagement with the container. See Meyer [096] fig. 3.

As per claim 22, Meyer [096] discloses inserting an exothermic material within the container prior to sealing the closure lid. See Meyer [096] col. 3 lines 1-25.

As per claim 27, Meyer [096] discloses the container being a single-walled container. See Meyer [096] abstract, figs. 1-4, column 1, col. 2 lines 35-68, col. 3 lines 1-25, and col. 4 lines 26-31.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5,11-12,20,23-24,26,28,32,34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer [096]. As per claims 5,20,28, Meyer [096] teaches all aspects of the claims except for specifically stating that a backing member should be inserted between the closure lid and the compression link such that the insertion there between urges the compression link radially outwardly from the closure lid and positions the container engagement surface of the compression link for engagement with the inner surface. It would have been obvious to one of ordinary skill in the art at the time the invention was made to place a backing member between the closure lid and the compression link such that the insertion there between urges the compression link radially outwardly from the closure lid and positions the container engagement surface of the compression link for engagement with the inner surface in order to produce a

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tighter fit and hence a better seal, since the backing member would be used to occupy loose space. In addition, it was known to wedge a backing member between loose fitting objects in order to provide a better seal by reducing the space by which air/gas/liquid could occupy at that border between two adjacent objects.

As per claims 11,23,34 Meyer [096] teaches all aspects of the claim except for explicitly stating that the exothermic material is spent nuclear fuel. Meyer [096] does however teach the exothermic material being radioactive waste. See Meyer [096] col. 1 lines 15-20,65-69, and col. 3 lines 20-30. However, since spent nuclear fuel is in fact a radioactive waste, it is the examiner's view that spent nuclear fuel is encompassed by Meyer [096] teaching's of radioactive waste. Therefore, because these two exothermic materials were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the spent nuclear fuel in the container for radioactive waste.

As per claims 12,32, Meyer [096] teaches the outer surface having a recess formed therein, and wherein the hold-down member has a retention ledge configured to engage the recess. See Meyer [096] fig. 3.

As per claim 24, Meyer [096] teaches all aspects of the claim except for specifically stating that the stepped outer surface be made of a surface harder than the bearing member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the stepped outer surface be made of a surface harder than the bearing member, since it has been held to be within the general

skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

As per claim 26, Meyer [096] teaches all aspects of the claim except for specifically stating that the closure lid lack holes for mechanical fasteners. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the closure lid lack holes for mechanical fasteners in order to provide seal that did not stress the container, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer [096] in view of Fields [250]. As per claim 35, Meyer [096] teaches all aspects of the claim except for specifically stating that a basket be configured to be inserted within the container for storing the exothermic material, wherein the basket is comprised of a neutron absorbing material. However, Fields [250] does teach a basket (52) being inserted into the container for storing the exothermic material. In addition, Fields [250] teaches the neutron absorbing material. See Fields [250] abstract, figs. 1,2, col. 3 lines 1-35,50-68, col. 4 lines 5-15 and col. 5 lines 15-40. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have a basket be configured to be inserted within the container for storing the exothermic material, wherein the basket is comprised of a neutron absorbing material in order to form an optimum payload configuration as taught in Fields [250].

R sponse to Arguments

Applicant's arguments with respect to claims 1-12,17,19-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Nos. 5,181,626 to Daenen et al, 4,810,890 to Blum, 4,783,309 to Popp et al, and 6,489,623 to Peters et al.

Daenen [626] is considered pertinent because of its discussion on a closure assembly for containers. Blum [890] is considered pertinent because of its discussion on a package for shipment of dangerous materials. Popp [309] is considered pertinent because of its discussion on a double container system for transporting and storing radioactive materials. Peters [623] is considered pertinent because of its discussion on a shipping container for radioactive materials and methods of fabrication.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Quash whose telephone number is (703)-308-6555. The examiner can normally be reached on M-F from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee, can be reached on (703)-308-4116. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.



A. Quash 10/7/03



JOHN R. LEE
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